		Exploring the E	xtreme
		2005 Scien	
		Curriculum Sta	
South Carolina Scie	nce		
Grade K			
Activity/Lesson	State	Standards	
			Predict and explain information or events
Finding the Center of			based on observation or previous
Gravity Using Rulers	SC	SCI.K.K-1.3	experience.
Finding the Center of			Compare objects by using nonstandard units
Gravity Using Rulers	SC	SCI.K.K-1.4	of measurement.
		Franks visa vidi s F	
		Exploring the E	
		2005 Scier Curriculum Sta	
South Carolina Scie	nce	Curriculum Sta	iiiuai us
Grade 1	1106		
Activity/Lesson	State	Standards	
, tour in y ,		010110101101	Compare, classify, and sequence objects by
			number, shape, texture, size, color, and
Finding the Center of			motion, using standard English units of
Gravity Using Rulers		SCI.1.1-1.1	measurement where appropriate.
, ,			· · ·
Finding the Center of			Carry out simple scientific investigations
Gravity Using Rulers	SC	SCI.1.1-1.3	when given clear directions.
Finding the Center of			Identify the location of an object relative to
Gravity Using Rulers	SC	SCI.1.1-5.1	another object.
E' a l'a a dia a O a ata a a f			
Finding the Center of		0014450	Explain the importance of pushing and
Gravity Using Rulers	SC	SCI.1.1-5.2	pulling to the motion of an object. Illustrate ways in which objects can move in
			terms of direction and speed (including
Finding the Center of			straight forward, back and forth, fast or slow,
Gravity Using Rulers		SCI.1.1-5.4	zigzag, and circular).
Cravity Coing Taloro		001.11.1 0.1	Zigzag, and onodiar).
		Exploring the E	Extreme
		2005 Scien	
		Curriculum Sta	ndards
South Carolina Scie	nce		
Grade 2			
Activity/Lesson	State	Standards	
Etalia de Carta			Carry out simple scientific investigations to
Finding the Center of		0010011	answer questions about familiar objects and
Gravity Using Rulers	50	SCI.2.2-1.1	events.
		Evaloring the F	
		Exploring the E 2005 Scien	
		Curriculum Sta	
South Carolina Scie	nce	Juniculum Sta	illidai ao
Grade 3			
	L		

Activity/Lesson	State	Standards	
			Generate questions such as "what if?" or
			"how?" about objects, organisms, and events
Finding the Center of			in the environment and use those questions
Gravity Using Rulers		SCI.3.3-1.3	to conduct a simple scientific investigation.
Gravity Comig Raiore		0011010 110	to contaget a comple coloniano invoctigationi
Finding the Center of			Predict the outcome of a simple investigation
Gravity Using Rulers	SC	SCI.3.3-1.4	and compare the result with the prediction.
			Identify the position of an object relative to a
			reference point by using position terms such
			as "above," "below," "inside of,"
Finding the Center of			"underneath," or "on top of" and a distance
Gravity Using Rulers	SC	SCI.3.3-5.1	scale or measurement.
Finding the Center of			Compare the motion of common objects in
Gravity Using Rulers		SCI.3.3-5.2	terms of speed and direction.
Clavity Osing Ruleis	00	001.0.0-0.2	Explain how the motion of an object is
Finding the Center of			affected by the strength of a push or pull and
Gravity Using Rulers		SCI.3.3-5.3	the mass of the object.
Finding the Center of			Explain the relationship between the motion
Gravity Using Rulers	SC	SCI.3.3-5.4	of an object and the pull of gravity.
			Generate questions such as "what if?" or
Finding the Center of			"how?" about objects, organisms, and events
Gravity Using Plumb		0010010	in the environment and use those questions
Lines	SC	SCI.3.3-1.3	to conduct a simple scientific investigation.
Finding the Center of Gravity Using Plumb			Dradiat the outcome of a simple investigation
Lines	sc	SCI.3.3-1.4	Predict the outcome of a simple investigation and compare the result with the prediction.
LINES	30	301.3.3-1.4	Identify the position of an object relative to a
			reference point by using position terms such
Finding the Center of			as "above," "below," "inside of,"
Gravity Using Plumb			"underneath," or "on top of" and a distance
Lines	SC	SCI.3.3-5.1	scale or measurement.
Finding the Center of			
Gravity Using Plumb			Compare the motion of common objects in
Lines	SC	SCI.3.3-5.2	terms of speed and direction.
			Concrete questions outle == "b=t !f0"
Changing the Contain			Generate questions such as "what if?" or
Changing the Center of Gravity Using			"how?" about objects, organisms, and events in the environment and use those questions
Moment Arms	SC	SCI.3.3-1.3	to conduct a simple scientific investigation.
Changing the Center		301.0.0 1.0	to conduct a simple scientific firestigation.
of Gravity Using			Predict the outcome of a simple investigation
Moment Arms	sc	SCI.3.3-1.4	and compare the result with the prediction.
Changing the Center			,
of Gravity Using			Infer meaning from data communicated in
Moment Arms	SC	SCI.3.3-1.6	graphs, tables, and diagrams.

	T	<u> </u>	Identify the position of an object relative to a
			reference point by using position terms such
Changing the Center			as "above," "below," "inside of,"
of Gravity Using			"underneath," or "on top of" and a distance
Moment Arms	sc	SCI.3.3-5.1	scale or measurement.
Changing the Center	30	301.3.3-3.1	Scale of measurement.
of Gravity Using			Compare the motion of common objects in
Moment Arms	sc	SCI.3.3-5.2	terms of speed and direction.
Changing the Center		001.0.0 0.2	Explain how the motion of an object is
of Gravity Using			affected by the strength of a push or pull and
Moment Arms	sc	SCI.3.3-5.3	the mass of the object.
Changing the Center		Conoio dio	and made of the dajoon
of Gravity Using			Explain the relationship between the motion
Moment Arms	sc	SCI.3.3-5.4	of an object and the pull of gravity.
		Exploring the E 2005 Scier	
		Curriculum Sta	
South Carolina Scie	nce	- Curriourum Ota	
Grade 4			
Activity/Lesson	State	Standards	
			Summarize the characteristics of a simple
			scientific investigation that represent a fair
			test (including a question that identifies the
			problem, a prediction that indicates a
			possible outcome, a process that tests one
Finding the Center of			manipulated variable at a time, and results
Gravity Using Rulers	SC	SCI.4.4-1.3	that are communicated and explained).
Finding the Center of			Distinguish among observations, predictions,
Gravity Using Rulers		SCI.4.4-1.4	and inferences.
Cravity Comignitations		00	Summarize the characteristics of a simple
			scientific investigation that represent a fair
			test (including a question that identifies the
			problem, a prediction that indicates a
Finding the Center of			possible outcome, a process that tests one
Gravity Using Plumb			manipulated variable at a time, and results
Lines	SC	SCI.4.4-1.3	that are communicated and explained).
Finding the Center of			
Gravity Using Plumb			Distinguish among observations, predictions
Lines	SC	SCI.4.4-1.4	and inferences.
			Summarize the characteristics of a simple
			scientific investigation that represent a fair
			test (including a question that identifies the
			problem, a prediction that indicates a
Changing the Center			possible outcome, a process that tests one
of Gravity Using			manipulated variable at a time, and results
Moment Arms	SC	SCI.4.4-1.3	that are communicated and explained).
Changing the Center			
of Gravity Using			Distinguish among observations, predictions
Moment Arms	SC	SCI.4.4-1.4	and inferences.

		Exploring the E	extreme
		2005 Scier	
		Curriculum Sta	ndards
South Carolina Sc	ience		
Grade 5			
Activity/Lesson	State	Standards	
Jet Propulsion	SC	SCI.5.5-1.1	Identify questions suitable for generating a hypothesis.
			Use a simple technological design process
			to develop a solution or a product,
			communicating the design by using
Jet Propulsion	SC	SCI.5.5-1.7	descriptions, models, and drawings.
·			Summarize the motion of an object in terms
Jet Propulsion	SC	SCI.5.5-5.2	of position, direction, and speed.
			Explain how unbalanced forces affect the
Jet Propulsion	SC	SCI.5.5-5.3	rate and direction of motion in objects.
			Identify independent (manipulated),
			dependent (responding), and controlled
Vectoring	SC	SCI.5.5-1.2	variables in an experiment.
			Plan and conduct controlled scientific
			investigations, manipulating one variable at a
Vectoring	SC	SCI.5.5-1.3	time.
			Evaluate results of an investigation to
			formulate a valid conclusion based on
			evidence and communicate the findings of
Vectoring	SC	SCI.5.5-1.6	the evaluation in oral or written form.
			Use a simple technological design process
			to develop a solution or a product,
			communicating the design by using
Vectoring	SC	SCI.5.5-1.7	descriptions, models, and drawings.
			Summarize the motion of an object in terms
Vectoring	SC	SCI.5.5-5.2	of position, direction, and speed.
Center of Gravity,			Summarize the motion of an object in terms
Pitch, Yaw	SC	SCI.5.5-5.2	of position, direction, and speed.
Center of Gravity,			Explain how unbalanced forces affect the
Pitch, Yaw	SC	SCI.5.5-5.3	rate and direction of motion in objects.
		Exploring the E	
		2005 Scien	
Courtly Courtly as C	•	Curriculum Sta	Indaras
South Carolina Sc	ience		
Grade 6	Ctots	Otan danda	
Activity/Lesson	State	Standards	lloo o to shaplaniani danima manana ta ulau
			Use a technological design process to plan
			and produce a solution to a problem or a
			product (including identifying a problem,
			designing a solution or a product,
Vectoring	80	SCI 6 6 4 4	implementing the design, and evaluating the
Vectoring	SC	SCI.6.6-1.4	solution or the product).

			Use a technological design process to plan
			and produce a solution to a problem or a
			product (including identifying a problem,
			· · · · · · · · · · · · · · · · · · ·
0 - 1 - 1 0 - 1			designing a solution or a product,
Center of Gravity,			implementing the design, and evaluating the
Pitch, Yaw	SC	SCI.6.6-1.4	solution or the product).
		Eveloring 4b o F	
		Exploring the E 2005 Scier	
		Curriculum Sta	
South Carolina Sc	ience	- Curricularii Cta	
Grade 7			
Activity/Lesson	State	Standards	
/		0.00.100.00	Generate questions that can be answered
Jet Propulsion	sc	SCI.7.7-1.2	through scientific investigation.
			Explain the reasons for testing one
			independent variable at a time in a controlled
Jet Propulsion	sc	SCI.7.7-1.3	scientific investigation.
oot i ropuloion		00	Explain the reasons for testing one
			independent variable at a time in a controlled
Vectoring	sc	SCI.7.7-1.3	scientific investigation.
vectoring	30	301.7.7-1.3	Critique a conclusion drawn from a scientific
Vectoring	sc	SCI.7.7-1.6	investigation.
Vectoring	30	301.7.7-1.0	Explain the relationships between
			·
			independent and dependent variables in a
			controlled scientific investigation through the
E E(C		0017745	use of appropriate graphs, tables, and
Fuel Efficiency	SC	SCI.7.7-1.5	charts.
		Exploring the E	Evtromo
		2005 Scier	
		Curriculum Sta	
South Carolina Sc	ience	- Carriodiani Ota	
Grade 8			
Activity/Lesson	State	Standards	
,			Construct explanations and conclusions from
			interpretations of data obtained during a
Vectoring	sc	SCI.8.8-1.3	controlled scientific investigation.
			Predict how varying the amount of force or
Vectoring	sc	SCI.8.8-5.4	mass will affect the motion of an object.
<u> </u>			Analyze the resulting effect of balanced and
Center of Gravity,			unbalanced forces on an object's motion in
Pitch, Yaw	sc	SCI.8.8-5.5	terms of magnitude and direction.
,		231.0.0 0.0	Use measurement and time-distance graphs
			to represent the motion of an object in terms
Fuel Efficiency	sc	SCI.8.8-5.1	of its position, direction, or speed.
i dei Eilicielicy	100	JOI.0.0-3.1	or its position, direction, or specu.